the likelihood to subsequent paralysis, as is also shown by the figures of Cadet de Gassicourt in his Traite Clinique des Maladies de l'Enfance. The latter also states that it is rare for the paralysis to be limited to any part other than the palate and pharynx. The experience of the writer has not been the same in this respect.

The large majority of limited paralysis terminate in recovery. Severe cases of general paralysis are usually fatal. The writer cites two severe cases of general paralysis, both of which recovered.

Henoch, De Gassicourt, Goodhart and others describe more than one class of cases of cardiac paralysis. The writer, however, thinks, that the pathology of cardiac paralysis may be different in different cases of diphtheria. He divides his cases into three classes: (1) Cases which die from heart failure during a time when exudation is still present upon the fauces and without there being any symptoms of paralysis. (2) Cases in which the patient having already become paralyzed is seized with symptoms of cardiac failure. (3) Cases in which the patient, being convalescent and having been free from membrane for some time is seized with heart failure. The cause of death in the first group of cases is rather to be sought in the immediate action of toxins on some part of the nervous mechanism, than in actual changes of a degenerative nature in the nerves or muscles. In the second group of cases, heart failure may be due to disordered innervation or to fatty changes which take place in the cardiac muscle during fevers. In the third group of cases death may be due to a degeneration of the cardiac muscle or to a degeneration of the vagus or its branches.

The symptoms usually associated with an affection of the vagus are: (1) Alteration in the action of the heart; (2) paresis or paralysis of the intrinsic muscles of the larynx and alteration in the rhythm of respiration; and (3) vomiting. The writer gives the history of a case, in which on the 16th day of the disease, ten days after the local exudation had disappeared, all the above named symptoms appeared, the child dying five days afterwards. Such cases, however, according to the writer's opinion, are very uncommon.

LOEWENKOPF.

The Nervous Manifestations of Hereditary Syphilis in Early Life.

B. Sachs. (*Am. Med. Surg. Bulletin*).—According to the author, syphilis, whether acquired or hereditary in early life, is a very small factor in the causation of a number of well-known nervous affections of childhood. The majority of cases of infantile cerebral palsies are due to other causes than syphilis. Hereditary syphilis in children is more apt to show itself in diseases of the teeth and bones; affections of the skin, liver, glands, etc., than in the nervous system, unless such heredity has come from a family who suffer from nervous or mental diseases.

It is stated in this paper that syphilitic disease of the nervous system in children can be recognized in the same manner as in adults, the affection usually becoming manifest in the brain and spinal cord and then only affecting a small area; as for instance, the cortex of the brain, the interpeduncular space, medulla and spinal cord; usually few symptoms are produced on account of the slight intensity of the disease at these points.

The author mentions that certain writers have attributed syphilis as the causating factor in such diseases of childhood as hydrocephalus, palsies, and encephalites. The author states that after careful study and observation, syphilis has been found to be a rare cause in these diseases.

He states that in cases of infantile palsies, where in conjunction with Dr. F. Petersen, they inquired into the histories most carefully in over 200 cases, syphilis was found to be the cause in only two cases. He calls especial attention to this point as being a contradiction to the statement of Erlenmeyer, who states that congenital syphilis is a frequent factor in the causation of such palsies. The writer explains these palsies in early life as being due to other causes than syphilis, as the difficulties encountered at times in complicated labors, the influences of acute infectious diseases, etc.

According to the author, ocular palsies which are a common manifestation of acquired syphilis in adults, may also occur at times in children, and may be the only symptom of hereditary syphilis; it may accompany hemiplegias or paraplegias due to the same cause. These paralytic disturbances of eye muscles in the young are probably due to either a thickening of the meninges and compression at the root fibres of the third, fourth, or sixth nerve, at the point of their emergence from the base of the brain, or to a special form of neuritis, affecting some and not all of the nerve fibres; also the nuclei may occasionally undergo primary degeneration, or the body may become diseased in consequence of slight hemorrhage, from certain diseased blood vessels. He states that although spinal tumors have been found in various parts of the cortex, near the aqueduct of sylvius, in the pons, medulla and spinal cord, the condition is an extremely rare one.

There are few objective signs of cerebral syphilis, to differentiate it from other forms of cerebral disease. Among those symptoms are immobility of the eye balls and persistent headaches, which are apt to precede the onset of motor, or sensory disturbances. The writer states that the spinal affections of syphilis are manifested in early spastic paraplegias, which are subject to recovery and relapses. Often they are accompanied with cerebral symptoms as palsies and immobility of the eye balls, pointing to an extensive cerebrospinal affection. The author describes a case of his own, and one of Freedman's, in which such symptoms were present.

According to the author, the morbid lesion, underlying, spinal syphilitic diseases consists in a thickening of the pia over a part of the central nervous system, with the formation of gummatous growths. We may have a specific endartritis in the blood-vessels of the spinal cord as well as in the blood-vessels of the brain, and as a result of this disease in the blood-vessels, either definite areas of softening take place, or minute hæmorrhages occur.

In conclusion he states that the morbid changes in hereditary syphilis may be extensive at any given level of the central nervous system, and still be slight in intensity, with regard to symptoms presented. They are subject to great variation.

BROWN.

Landry's Paralysis Due to a Streptococcus.—Dr. Paul Remlinger.

The patient, a soldier of the French army, had passed through the fatigues of the campaign of 1895 in Madagascar with no troubles except an intermittent fever contracted in November of that year, of which he had the last access in Paris the first of January, 1896; January 19th he was suddenly awakened by sharp lancinating pains in both thighs. The course of the disease was typical and acute from this moment, the patient dying January 31st. At the autopsy, twenty-eight hours after death, the liver was found enlarged and spotted with black pigment; the spleen was also enlarged and pigmented. Cultures were made from the spine in the cervical, dorsal, and lumbar regions, from which a pure culture of streptococcus developed in twenty-four hours. By way of a control experiment and to show that streptococcus had not developed during the twenty-eight hours which intervened between death and the making of the cultures, cultures were tried of blood removed from the popliteal vessels. This remained entirely sterile. However, it has probably been sufficiently demonstrated already that streptococci are not microbes which invade the tissues post-mortem. Marinesco made the pathological examination of the case. It may be mentioned that, in conjunction with Dr. Oettinger and Dr. Marie, Dr. Marinesco had already published two observations of acute ascending paralysis in which the presence of microbes had been demonstrated, apearing in the first to be streptococci and in the second anthrax bacilli. His report is brief, and only mentions that the anterior cornua contained in its lymphatic spaces small chains of streptococci. These were